

1/25

RECORDABLE/REPRODUCIBLE OPTICAL DISC
(DVD-RAM/DVD-RW OR DVD-R) 10

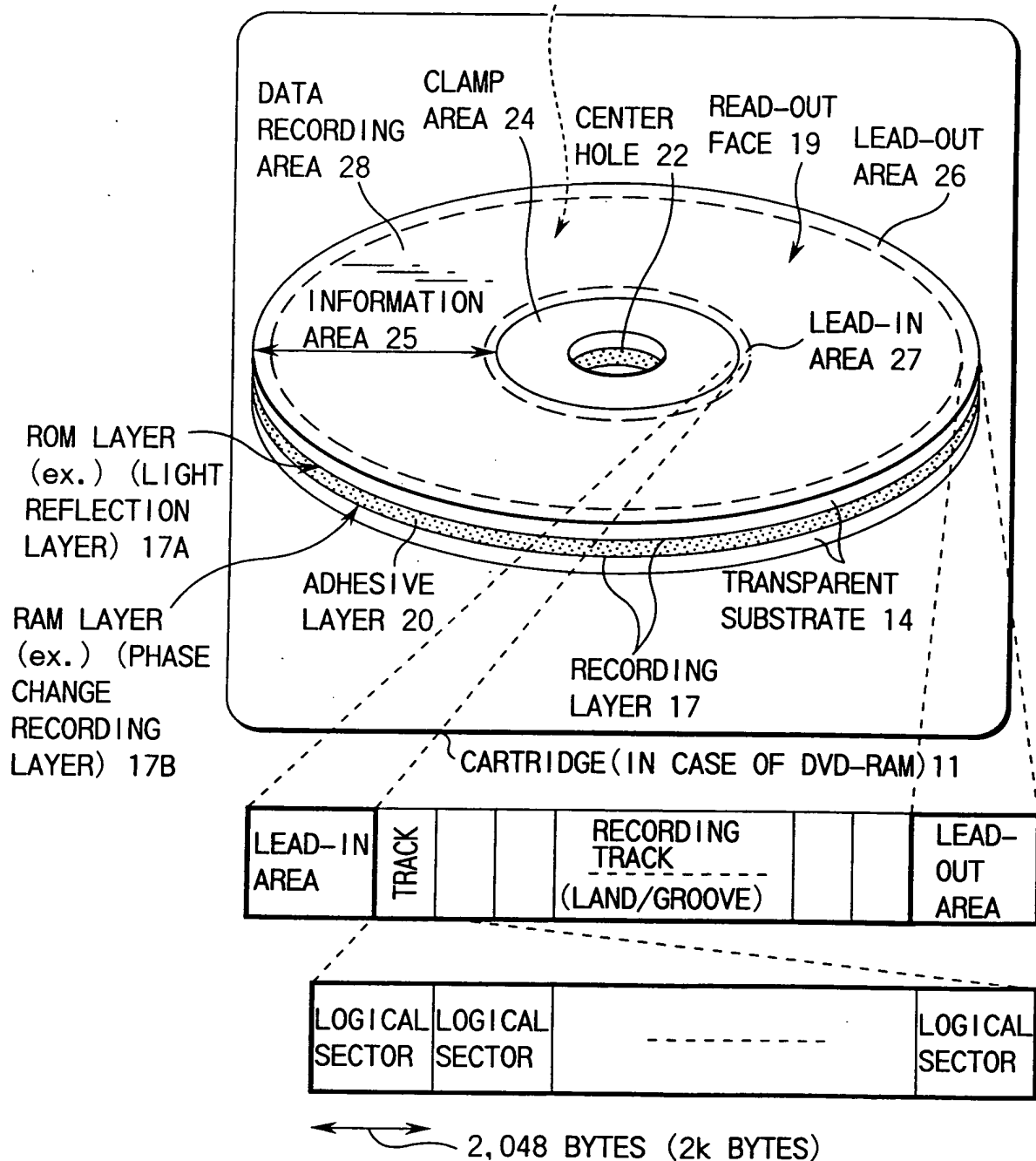


FIG. 1

2/25

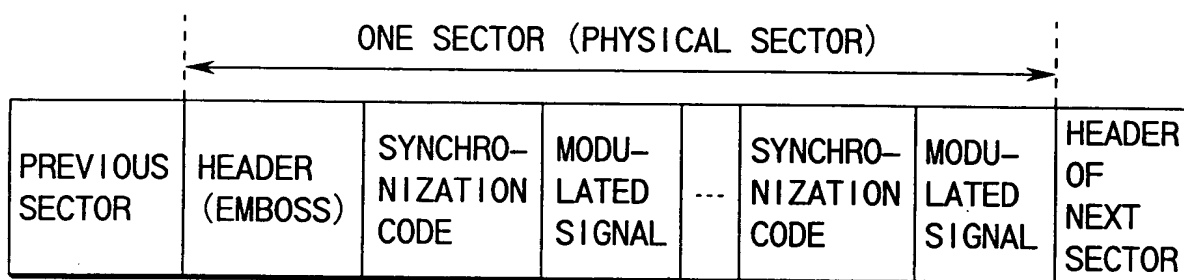


FIG. 2

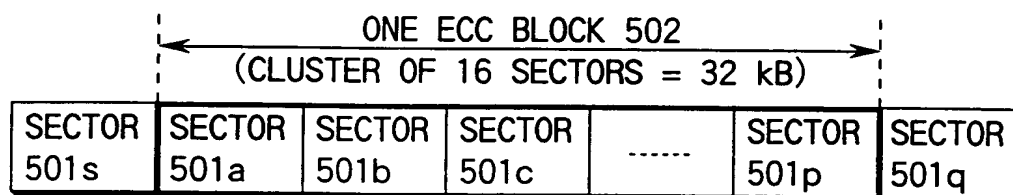


FIG. 3

3/25

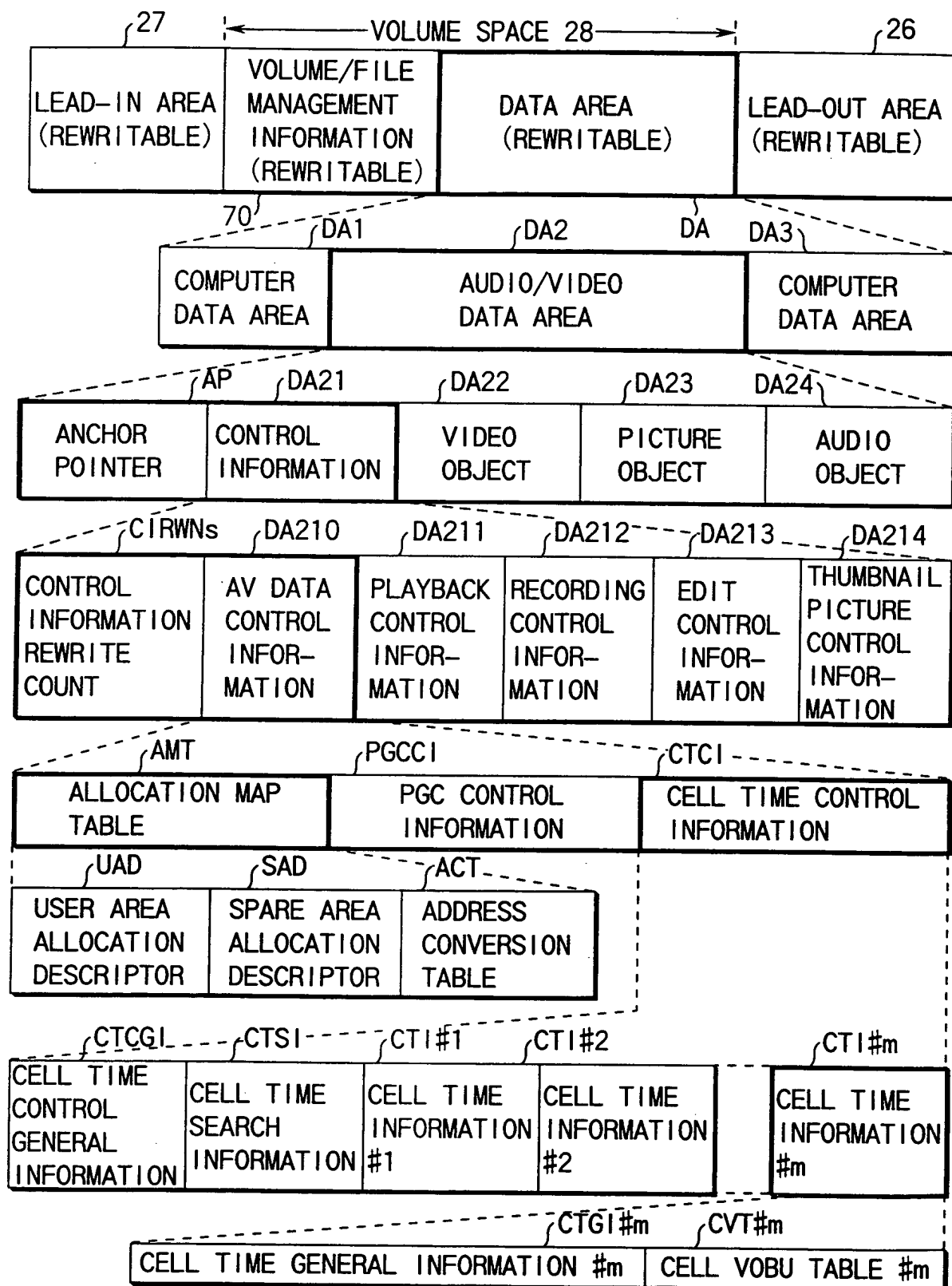


FIG. 4

4/25

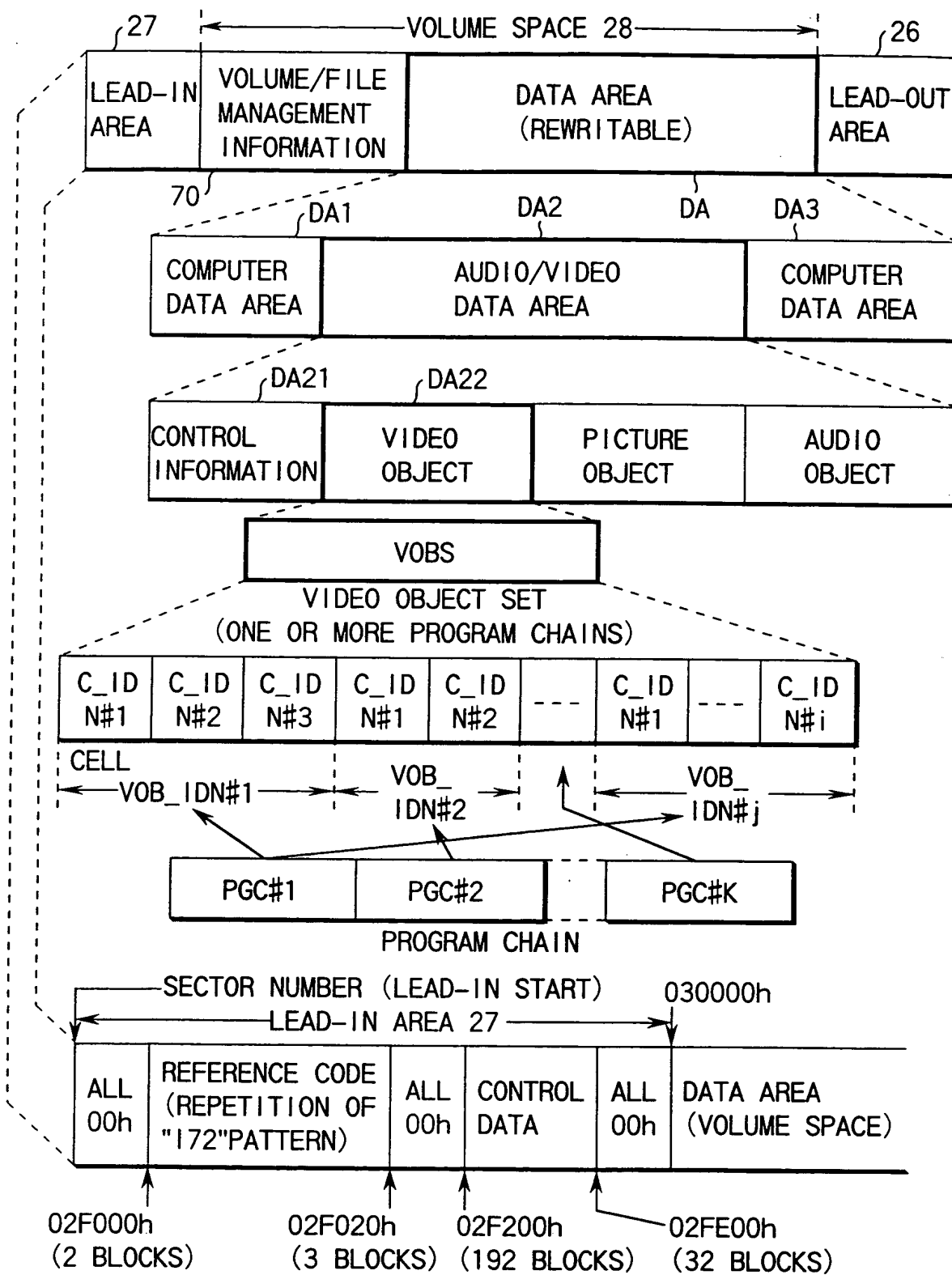


FIG. 5

5/25

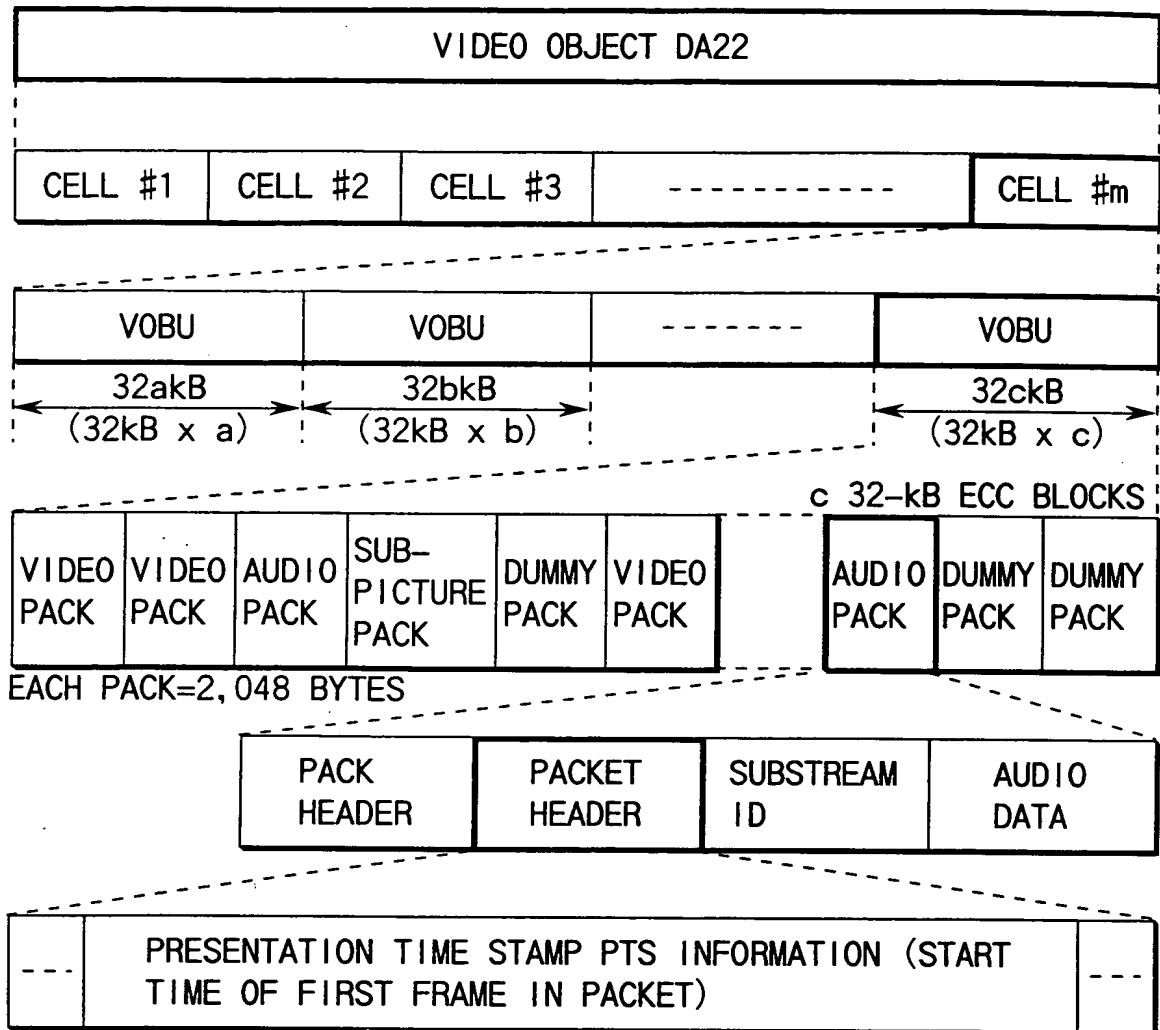


FIG. 6

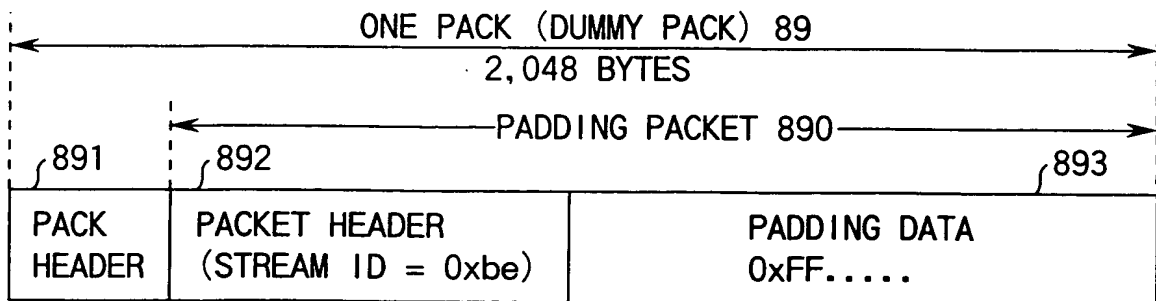


FIG. 7

6/25

| | | | | | | |
|-----------------------------------|-----------------------------------|-----|-----------------------------------|-----------------------------------|-----|-----------------------------------|
| NUMBER OF PICTURES IN VOB#1 | NUMBER OF PICTURES IN VOB#2 | --- | NUMBER OF PICTURES IN VOB#n | NUMBER OF PICTURES IN VOB#1 | --- | NUMBER OF PICTURES IN VOB#n |
|-----------------------------------|-----------------------------------|-----|-----------------------------------|-----------------------------------|-----|-----------------------------------|

| | | | | | | | | |
|------------|--------------------------------|--------------------------------------|--|----------------------------------|--|-----------------------|--|------------------------------------|
| CELL ID | TOTAL TIME DURA- TION | NUMBER OF CELL DATA SETS | CELL DATA SET DESC- RIPTOR | CELL TIME PHYSICAL SIZE | NUMBER OF CONSTI- TUTENT VOBUS | TIME CODE TABLE | NUMBER OF ACQUI- RED DEFECTS | ACQUI- RED DEFECT ADDRESS |
|------------|--------------------------------|--------------------------------------|--|----------------------------------|--|-----------------------|--|------------------------------------|

<REMARKS> SET IS ALSO
REFERRED TO AS EXTENT

| | | | | | |
|--|-----------------------|--|-----------------------------------|-----------------------------------|---|
| CELL DATA GENERAL INFOR- MATION | TIME CODE TABLE | ACQUIRED DEFECT INFOR- MATION | CELL VIDEO INFOR- MATION | CELL AUDIO INFOR- MATION | CELL SUB- PICTURE INFOR- MATION |
|--|-----------------------|--|-----------------------------------|-----------------------------------|---|

CELL TIME INFORMATION CTI#m

| | |
|----------------------------------|--------------------|
| CELL TIME GENERAL INFORMATION #m | CELL VOBU TABLE #m |
|----------------------------------|--------------------|

| | | | |
|---------------------------|---------------------------|-------|---------------------------|
| VOBU INFORMATION #1 | VOBU INFORMATION #2 | ----- | VOBU INFORMATION #n |
|---------------------------|---------------------------|-------|---------------------------|

| | | |
|-----------------------------|---------------------------|---|
| VOBU GENERAL INFORMATION | DUMMY PACK INFORMATION | AUDIO SYNCHRONIZATION INFORMATION |
|-----------------------------|---------------------------|---|

FIG. 8

7/25

| CORRESPONDING INFORMATION | INFORMATION NAME | INFORMATION CONTENTS | NUMBER OF BYTES USED |
|-----------------------------------|---|--|-----------------------|
| VOBU GENERAL INFORMATION | I-PICTURE END POSITION | DIFFERENTIAL ADDRESS VALUE OF I-PICTURE END POSITION FROM VOB START POSITION | 1 |
| DUMMY PACK INFORMATION | NUMBER OF DUMMY PACKS | NUMBER OF DUMMY PACKS IN VOB | 1 |
| | DUMMY PACKS DISTRIBUTION | DUMMY PACK INSERTION DIFFERENTIAL ADDRESS FROM START OF VOB, AND EACH NUMBER OF DUMMY PACKS (2 BYTES EACH) | 2 x DUMMY PACK NUMBER |
| AUDIO SYNCHRONIZATION INFORMATION | AUDIO STREAM CHANNEL NUMBER | NUMBER OF CHANNELS OF AUDIO STREAM | 1 |
| | I-PICTURE AUDIO POSITION #1 | DIFFERENTIAL ADDRESS VALUE OF SECTOR INCLUDING AUDIO PACK OF THE SAME TIME AS I-PICTURE START TIME FROM START OF VOB (MSB = "0" : LOCATED BEFORE VOB, MSB = "1" : LOCATED AFTER VOB) | 1 |
| | I-PICTURE START AUDIO SAMPLE NUMBER #1 | INDICATE SAMPLE NUMBER OF AUDIO SAMPLE POSITION OF THE SAME TIME AS I-PICTURE START TIME IN SECTOR AS COEFFICIENT OF SERIAL NUMBERS OF ALL AUDIO PACKS | 2 |
| | AUDIO SYNCHRONIZATION INFORMATION FLAG #1 | PRESENCE/ABSENCE OF SYNCHRONIZATION INFORMATION BETWEEN AUDIO AND VIDEO STREAMS (NEXT ITEM IS NOT AVAILABLE IF ABSENT) | 1 |
| | AUDIO SYNCHRONIZATION DATA | THE NUMBER OF AUDIO SAMPLES INCLUDED IN VOB | 2 |
| | ----- | | |
| | I-PICTURE AUDIO POSITION #2 | SAME CONTENTS AS #1 | 1 |
| | I-PICTURE START AUDIO SAMPLE NUMBER #2 | | 2 |
| | AUDIO SYNCHRONIZATION FLAG #2 | | 1 |
| | AUDIO SYNCHRONIZATION DATA | | 2 |

FIG. 9

8/25

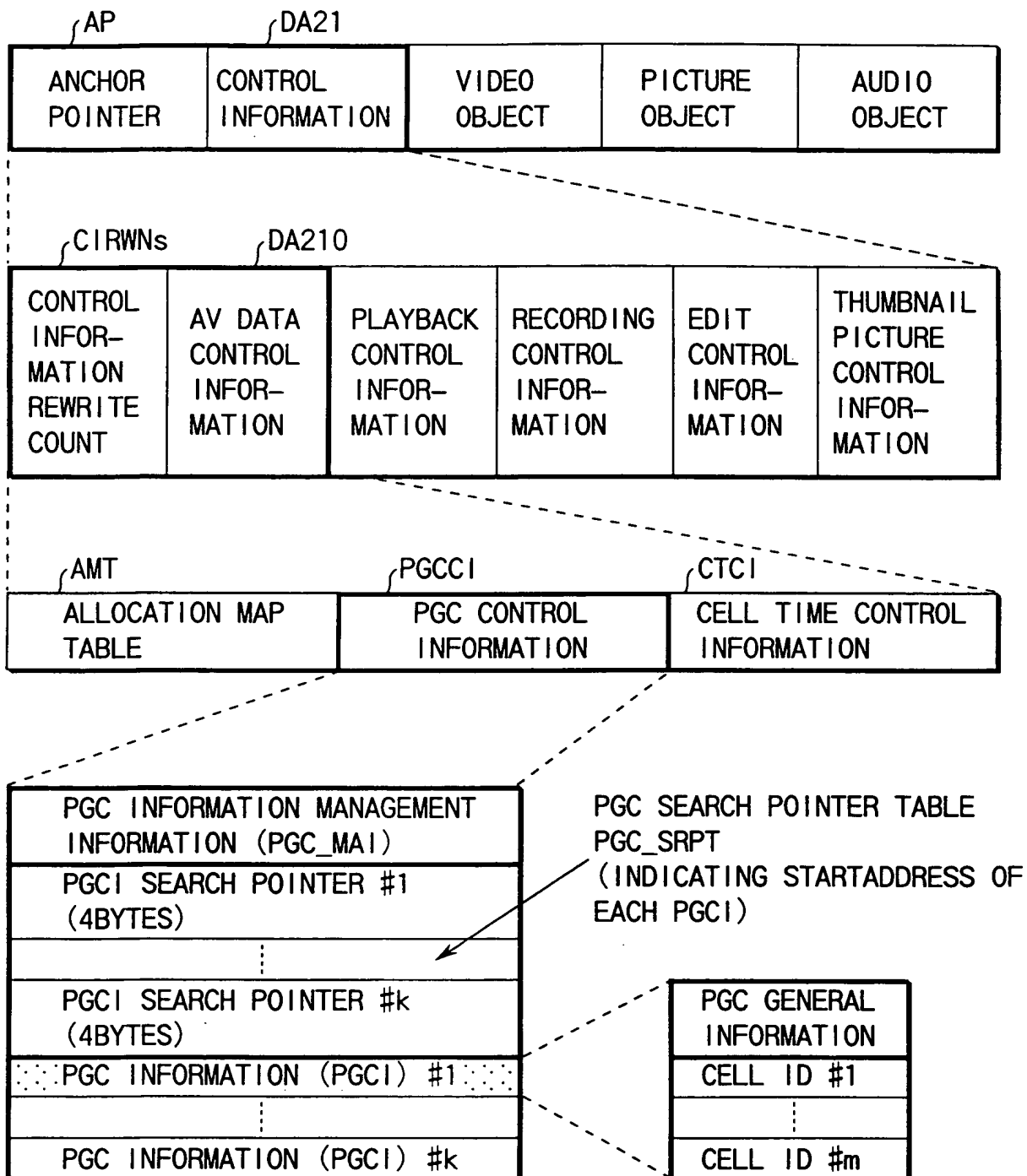


FIG. 10

9/25

POSITIONS OF SHIFT PRODUCED
BETWEEN ECC BLOCK BOUNDARY
AND VOBU BOUNDARY

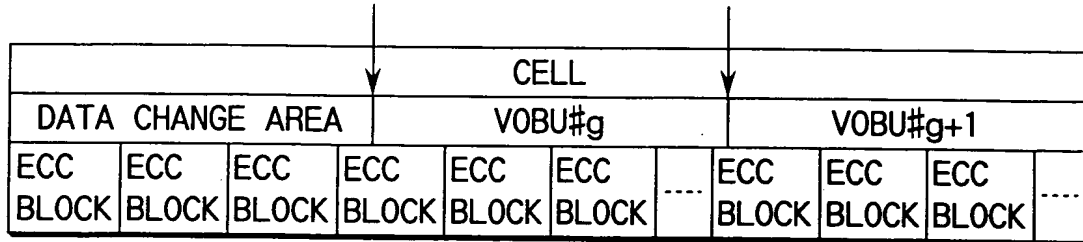


FIG. 11

SHIFT-REMOVED POSITIONS BETWEEN
BOUNDARIES OF ECC AND VOB

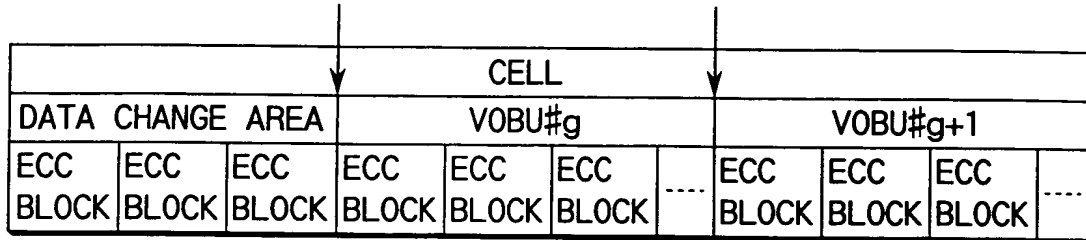


FIG. 12

10/25

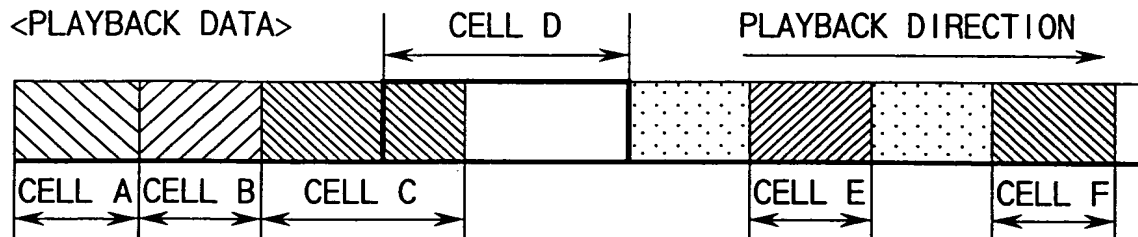


FIG. 13

PGC INFORMATION

| PGC#1 | | PGC#2 | | PGC#3 | |
|------------------------|--------|------------------------|--------|------------------------|--------|
| NUMBER OF CELLS = 3 | | NUMBER OF CELLS = 3 | | NUMBER OF CELLS = 5 | |
| CELL#1 | CELL A | CELL#1 | CELL D | CELL#1 | CELL E |
| CELL#2 | CELL B | CELL#2 | CELL E | CELL#2 | CELL A |
| CELL#3 | CELL C | CELL#3 | CELL F | CELL#3 | CELL D |
| _____ | _____ | _____ | _____ | CELL#4 | CELL B |
| _____ | _____ | _____ | _____ | CELL#5 | CELL E |

FIG. 14

11/25

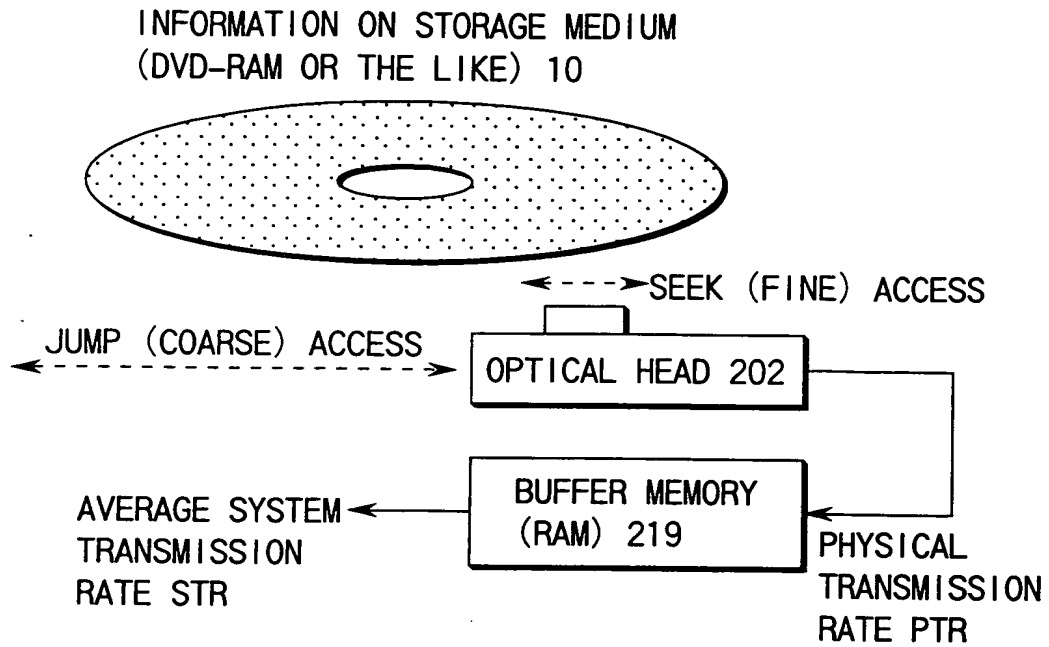


FIG. 15

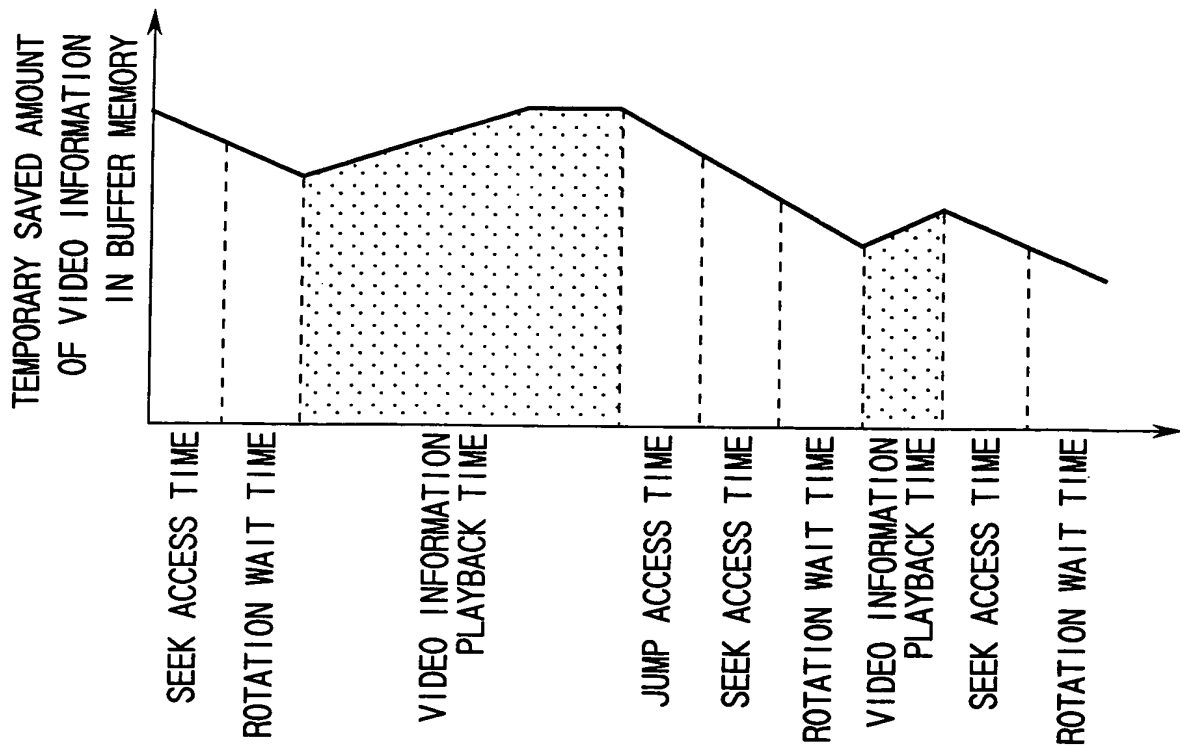


FIG. 16

12/25

FIG. 17

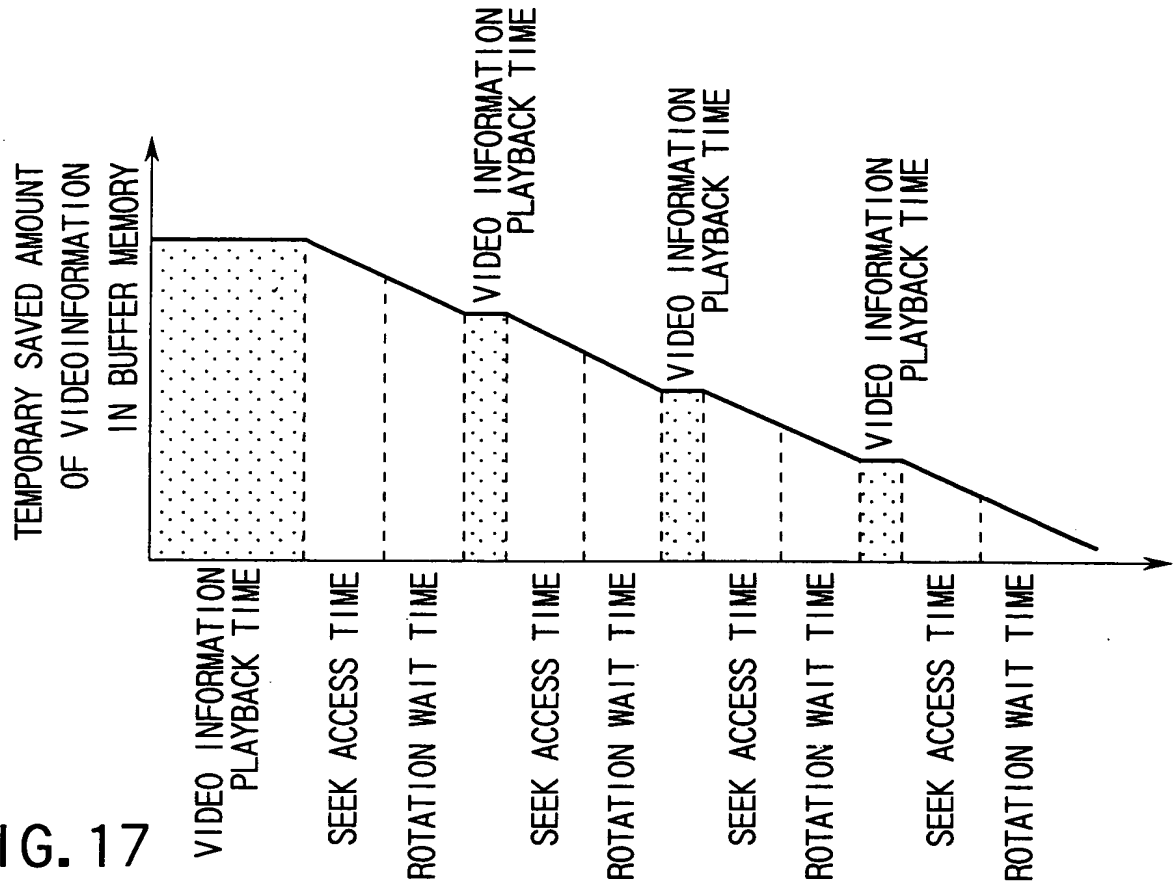
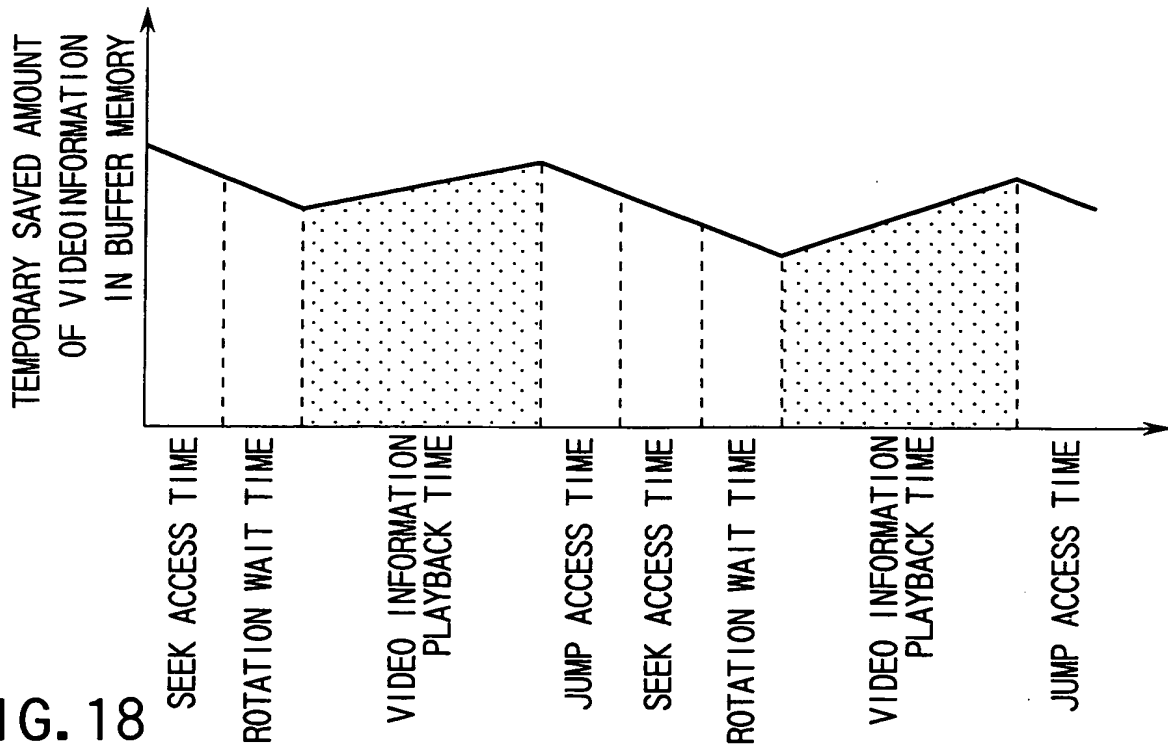


FIG. 18



13/25

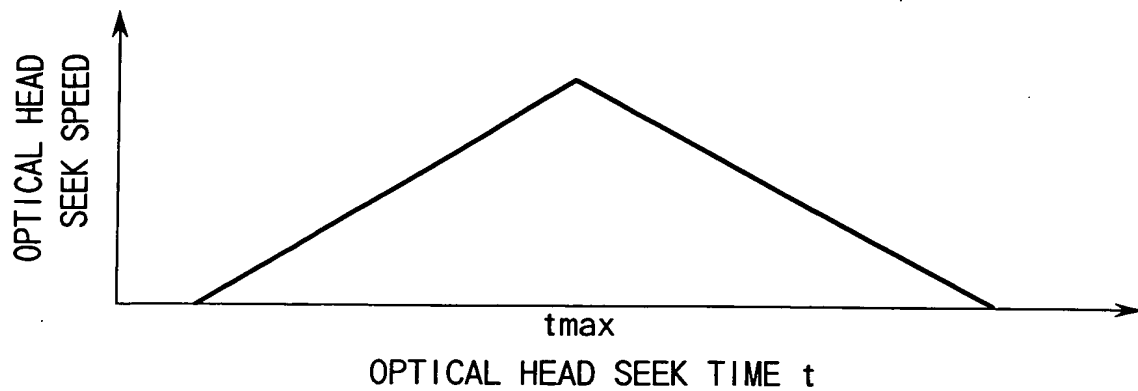


FIG. 19

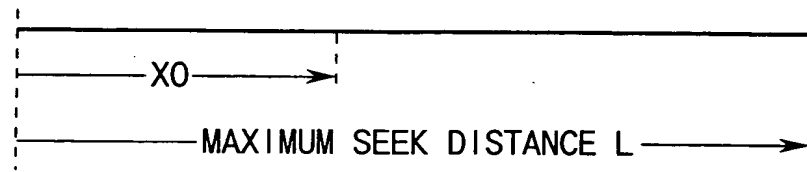


FIG. 20

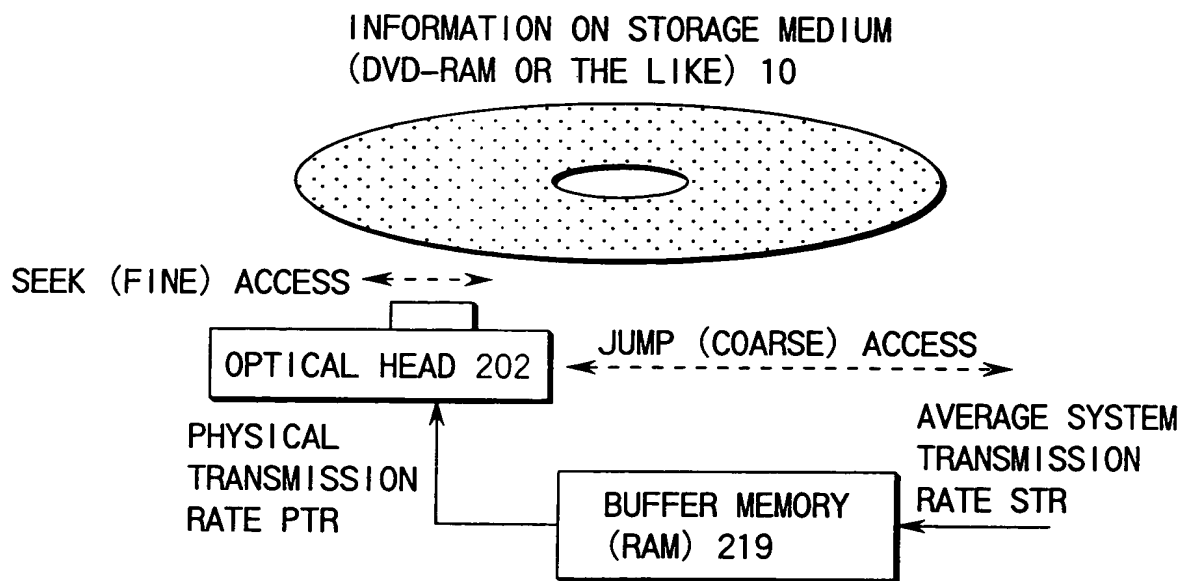


FIG. 21

14/25

| FREE AREA 107 | CELL #1 | | | CELL #2 | | | | CELL #3 | | |
|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | VOBU 108a | VOBU 108b | VOBU 108c | VOBU 108d | VOBU 108e | VOBU 108f | VOBU 108g | VOBU 108h | VOBU 108i | VOBU 108j |

FIG. 22

| FREE AREA 107 | CELL #1 | | | CELL #2A | CELL #2B | | | CELL #3 | | |
|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | VOBU 108a | VOBU 108b | VOBU 108c | VOBU 108d | VOBU 108e | VOBU 108f | VOBU 108g | VOBU 108h | VOBU 108i | VOBU 108j |

FIG. 23

| CELL #2A | CELL #1 | | | | | CELL #2B | | | CELL #3 | | |
|---------------|--------------|--------------|--------------|---------------|--|--------------|--------------|--------------|--------------|--------------|--------------|
| VOBU 108d* | VOBU 108p | VOBU 108a | VOBU 108b | VOBU 108c* | | VOBU 108q | VOBU 108f | VOBU 108g | VOBU 108h | VOBU 108i | VOBU 108j |

FREE AREA 106

FIG. 24

15/25

FIG. 25

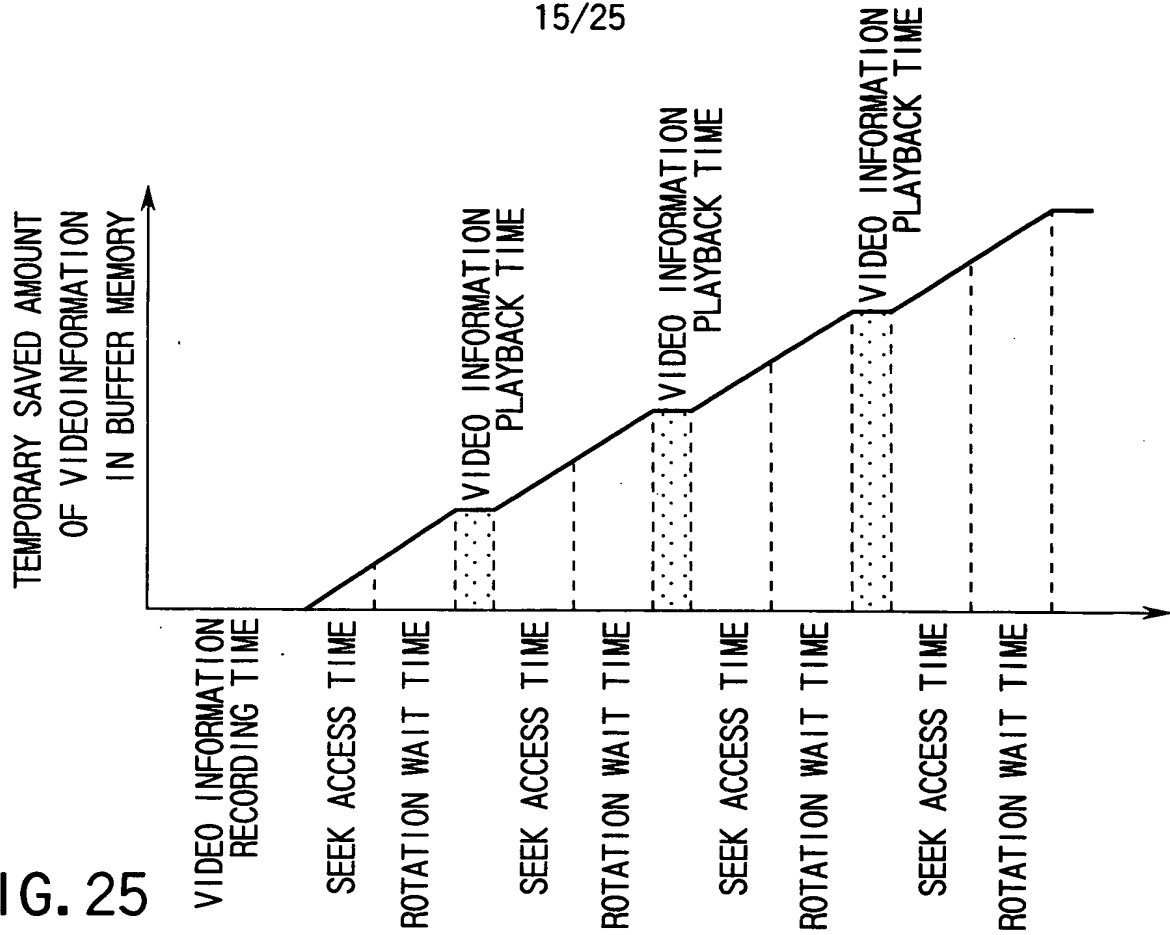
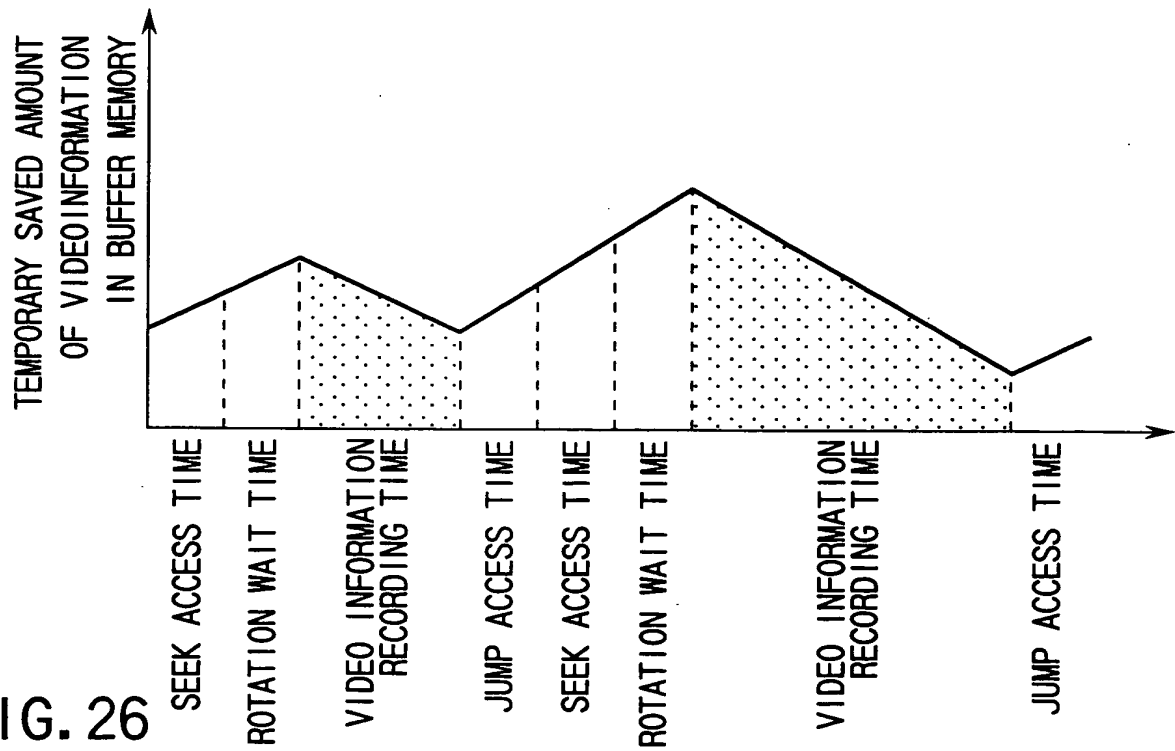


FIG. 26



16/25

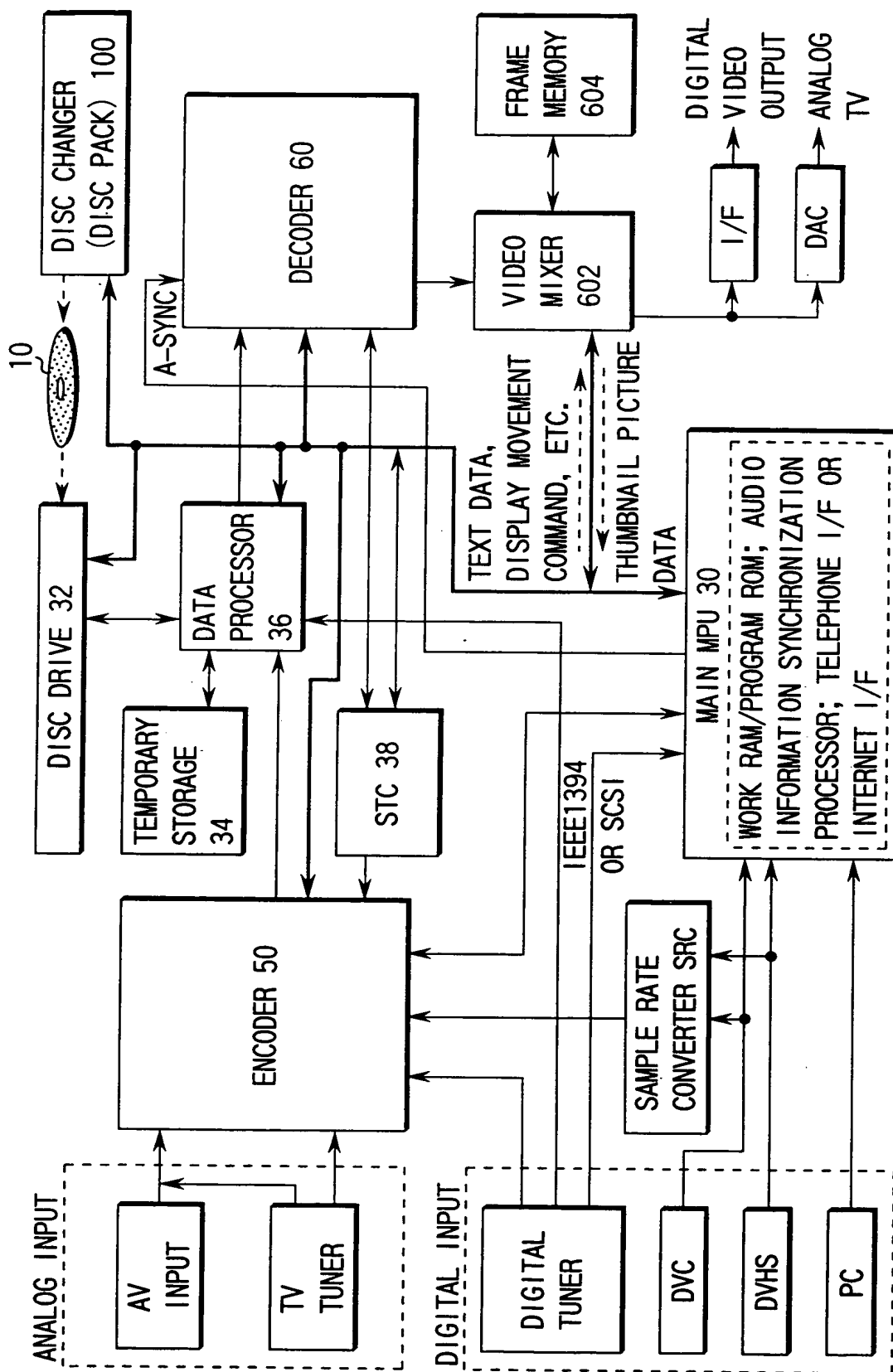


FIG. 27

17/25

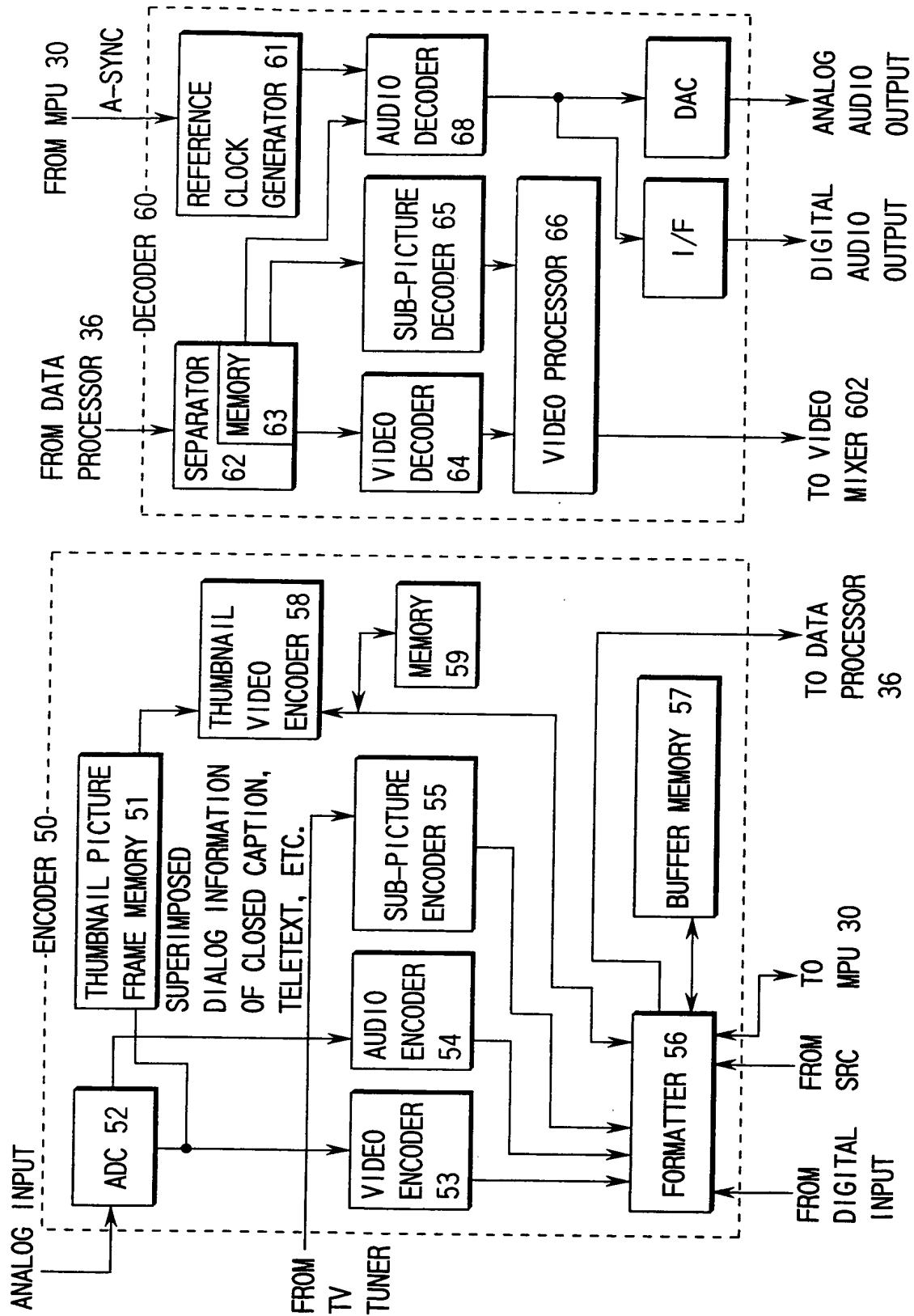


FIG. 28

18/25

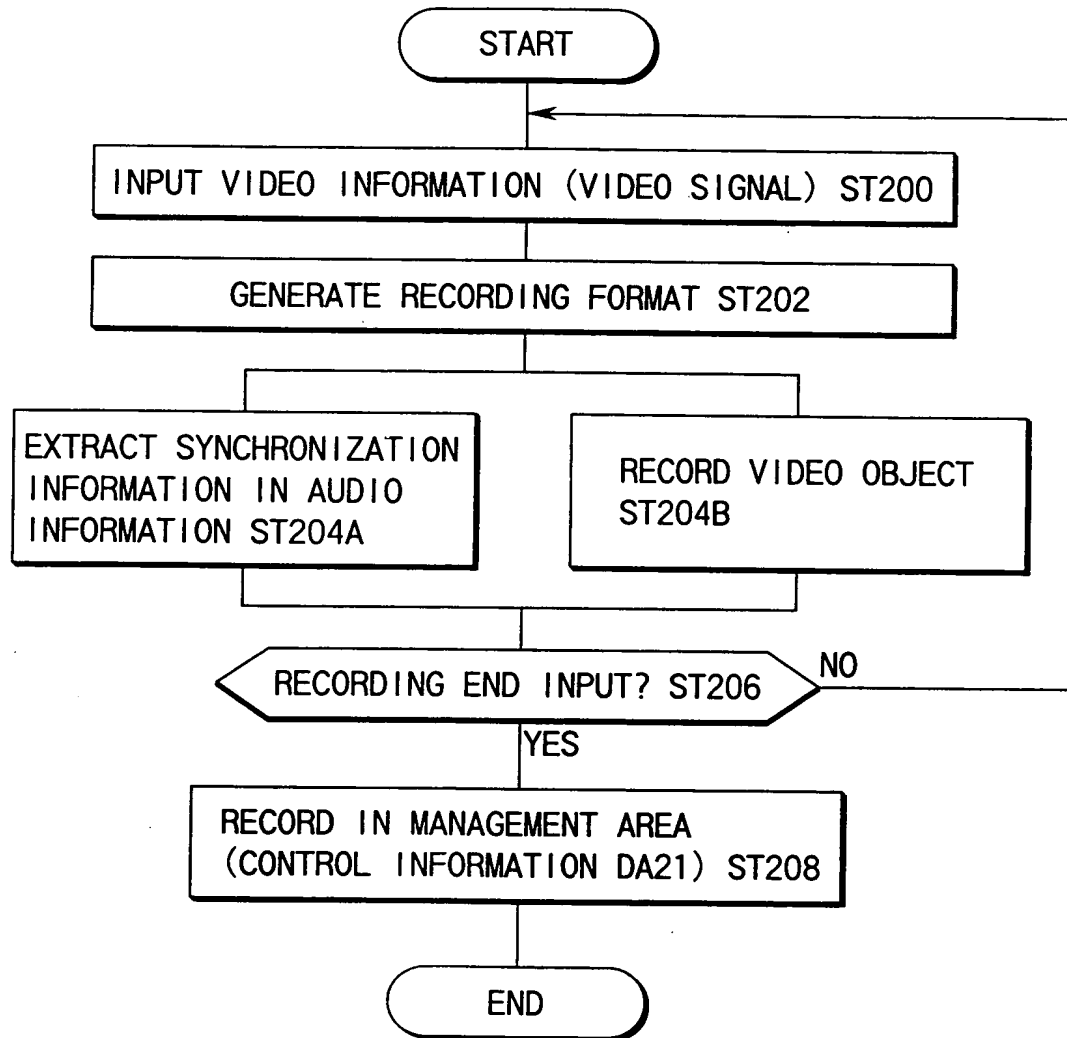


FIG. 29

19/25

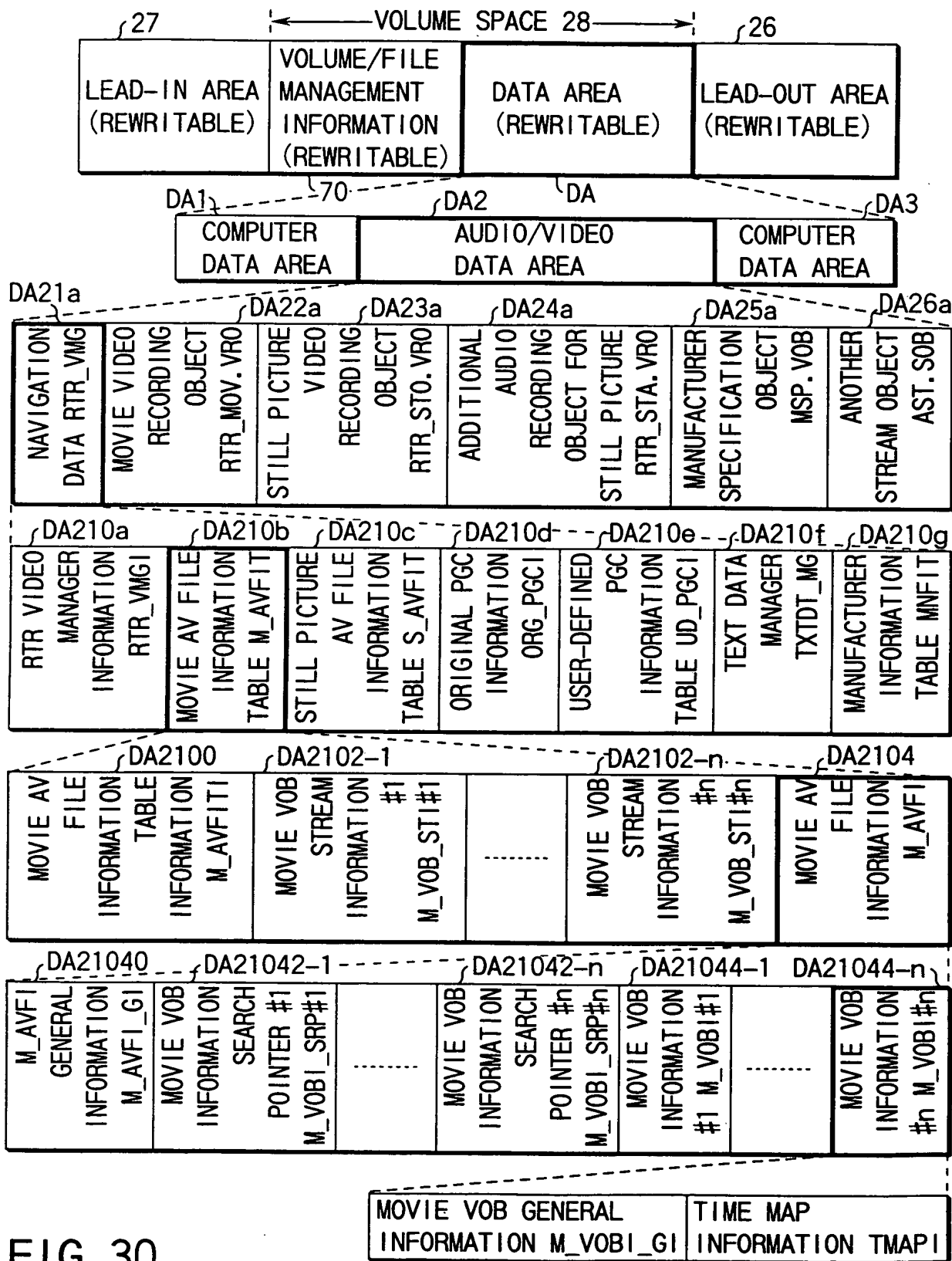


FIG. 30

20/25

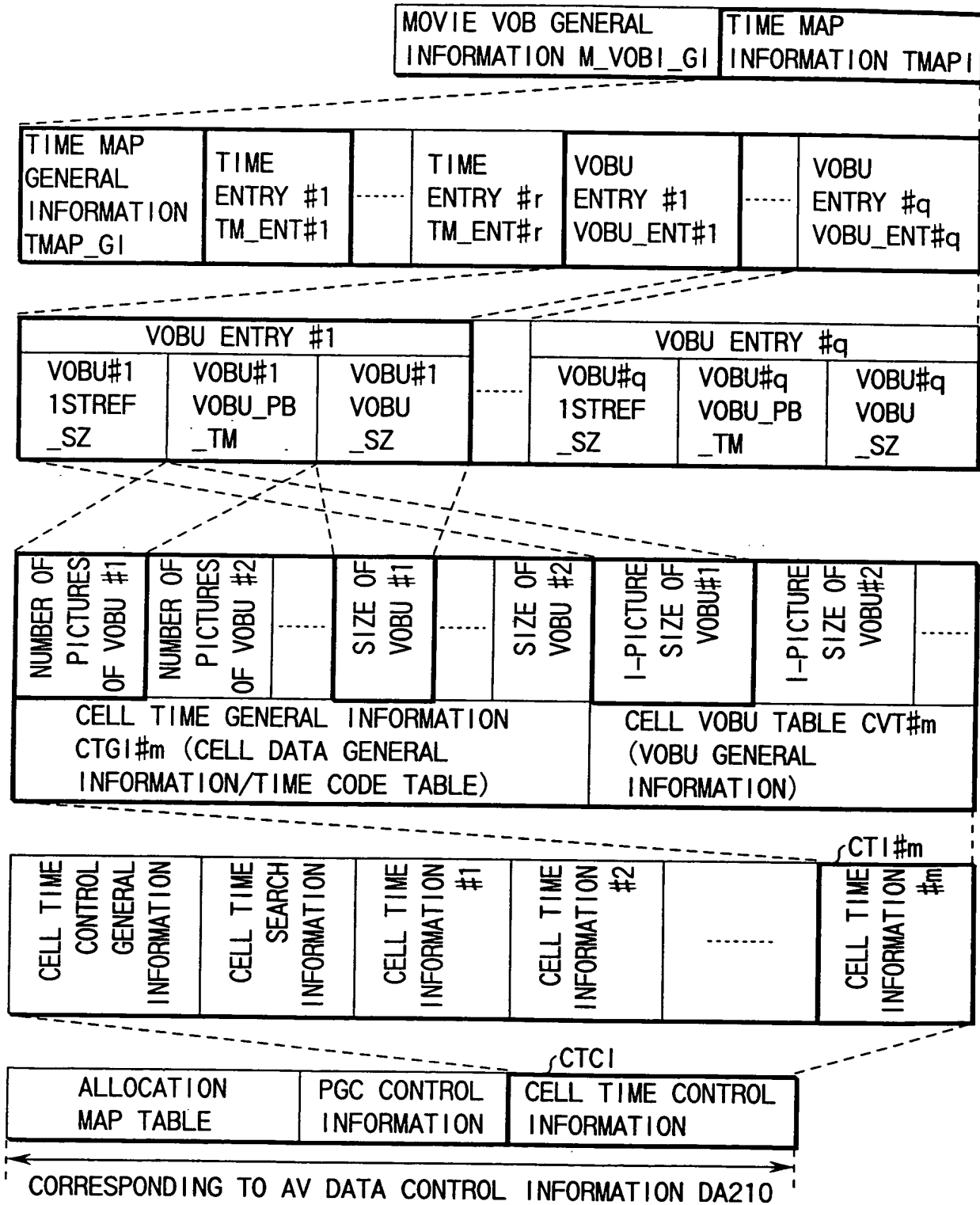


FIG. 31

21/25

TIME MAP GENERAL INFORMATION TMAP_GI

| RELATIVE BYTE POSITION | FIELD NAME | CONTENTS | NUMBER OF BYTES |
|------------------------|-------------|-------------------------|-----------------|
| 0-1 | TM_FNT_Ns | NUMBER OF TIME ENTRIES | 2 |
| 2-3 | VOBU_ENT_Ns | NUMBER OF VOBUE ENTRIES | 2 |
| 4-5 | TM_OFS | TIME OFFSET | 2 |
| 6-9 | ADR_OFS | ADDRESS OFFSET | 4 |

FIG. 32

TIME ENTRY TM_ENT

| RELATIVE BYTE POSITION | FIELD NAME | CONTENTS | NUMBER OF BYTES |
|------------------------|------------|----------------------|-----------------|
| 0-1 | VOBU_ENTN | VOBU ENTRY NUMBER | 2 |
| 2 | TM_DIFF | TIME DIFFERENCE | 1 |
| 3-6 | VOBU_ADR | TARGET VOBUE ADDRESS | 4 |

FIG. 33

22/25

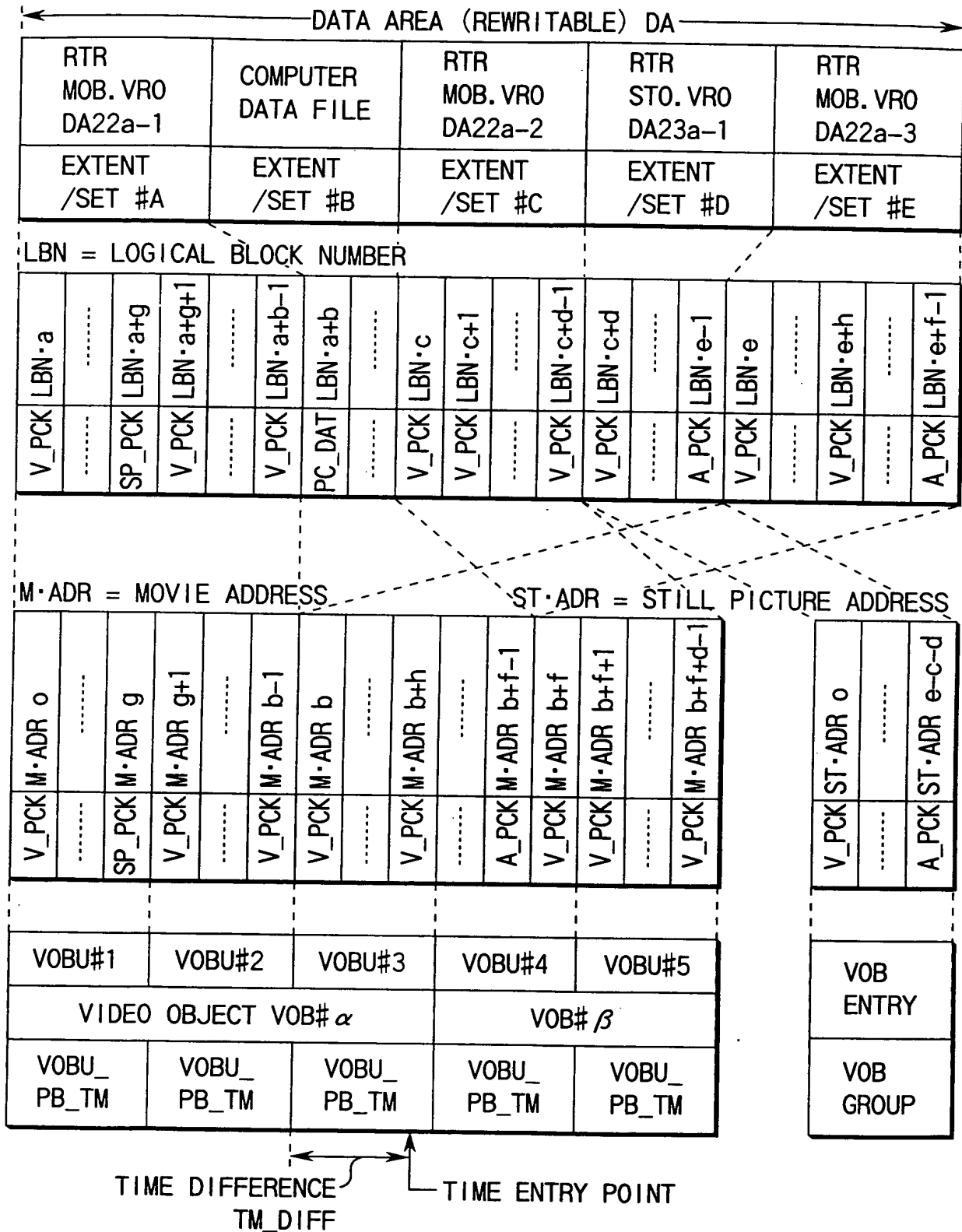


FIG. 34

23/25

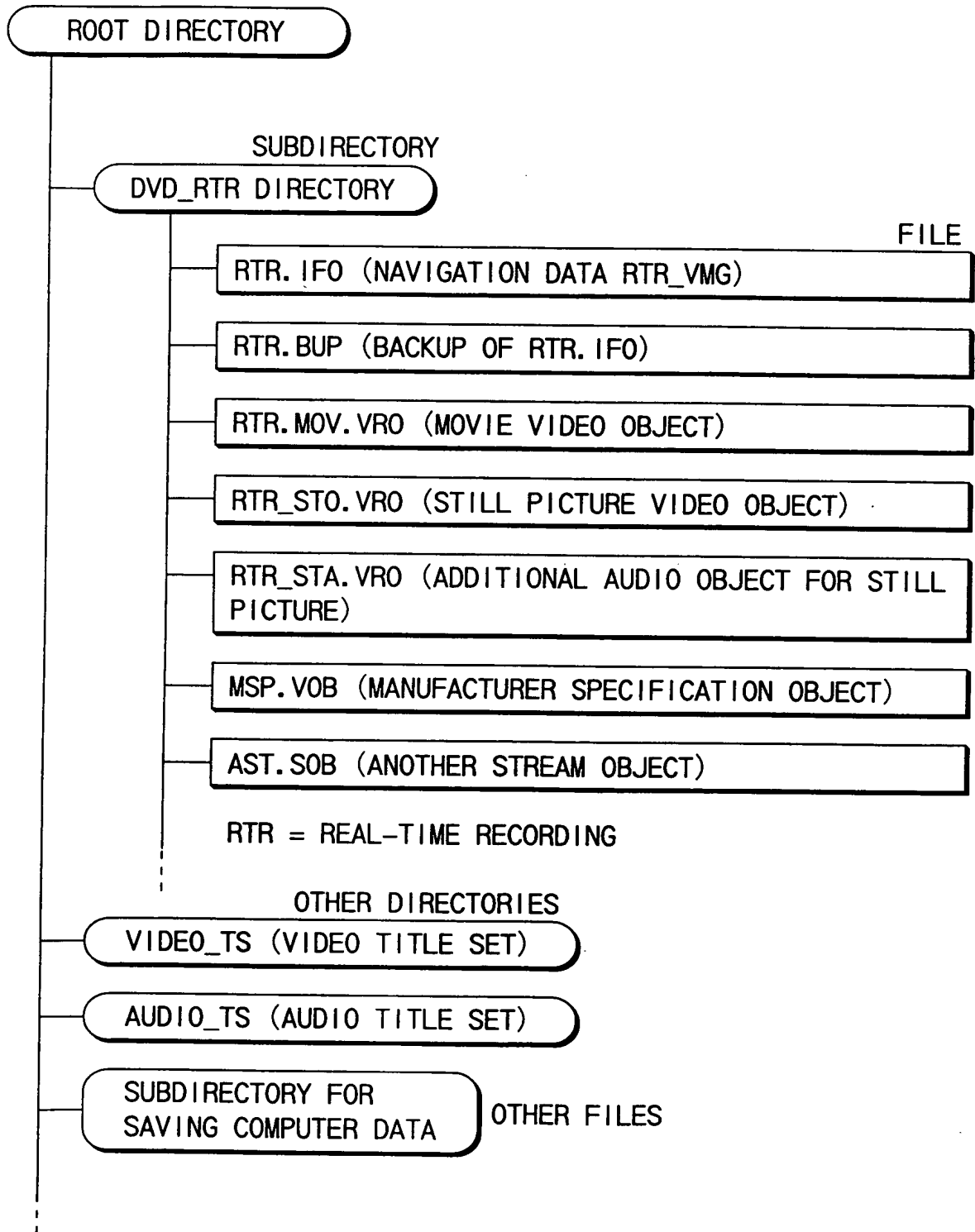


FIG. 35

24/25

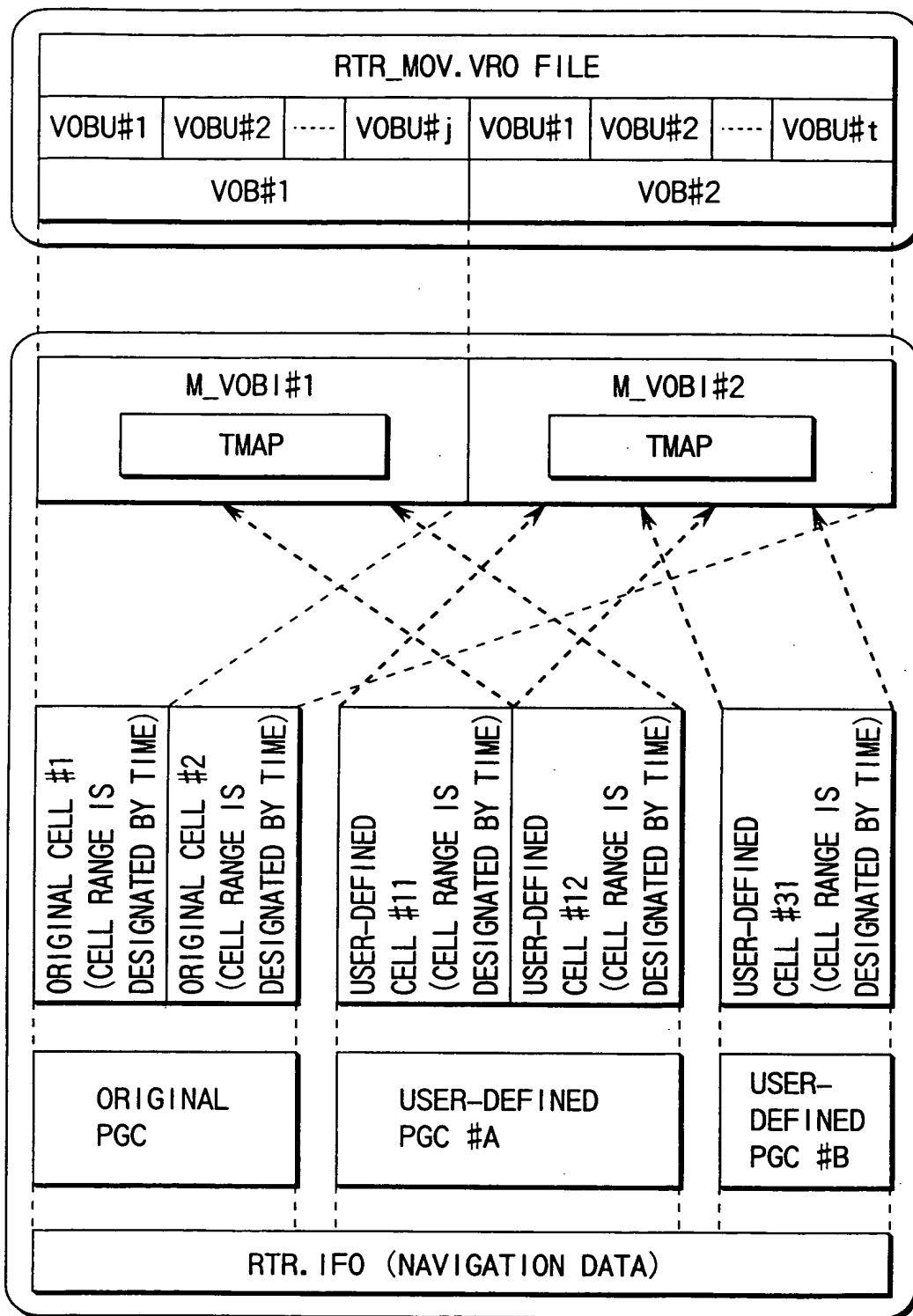


FIG. 36

25/25

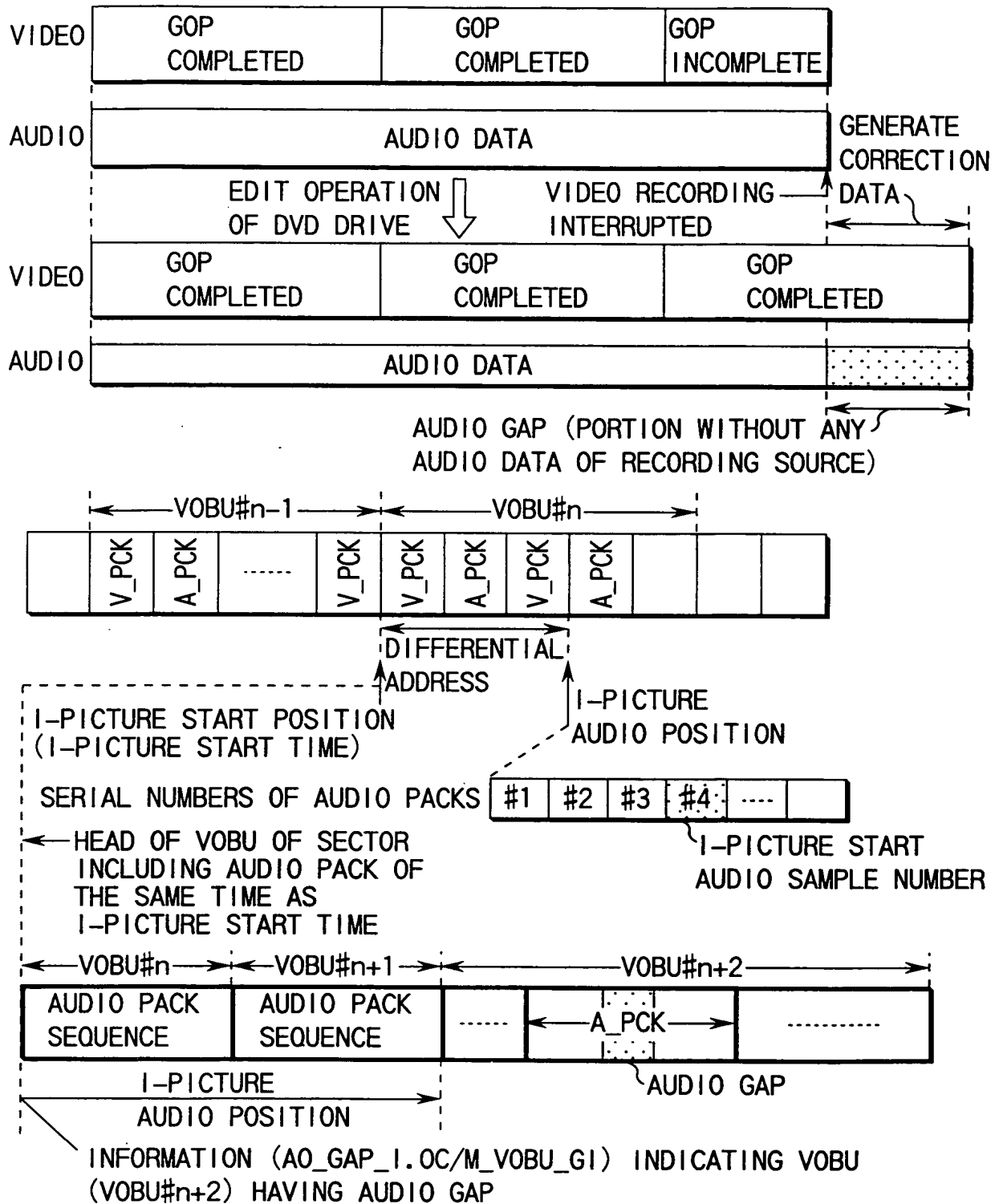


FIG. 37